REMARKS

In the Office Action mailed February 23, 2004 the Examiner noted that claims 1-43 were pending, that claims 1-5, 14-24, 26-29, 31-34, 36-39, and 41-43 have been withdrawn from consideration, and rejected claims 6-13, 25, 30, 35, and 40. Claims 6, 8, 13, 25, 30, 35 and 40 have been amended and new claim 44 has been added, and thus, in view of the forgoing claims 6-13, 25, 30, 35, 40 and 44 remain pending for reconsideration which is requested. No new matter has been added. The Examiner's rejections and objections are traversed below.

The Examiner has objected to the specification which has been amended in consideration of the Examiner's comments. Withdrawal of the objection is requested.

The Examiner has also objected to claims 8 and 13 and these claims have been amended in consideration of the Examiner's comments. Withdrawal of the objection is requested.

In the Office Action the Examiner rejected claims 6-13, 25, 30, 35 and 40 under 35 U.S.C. section 112 paragraph 2 as indefinite. The claims have been amended in consideration of the Examiner's comments and it is submitted they satisfy the requirements of the statute. If additional concerns with the claims arise, the Examiner is invited to telephone to resolve the same. Suggestions by the Examiner are also welcome. Withdrawal of the rejection is requested.

On page 3 of the Office Action, the Examiner rejected claims 6, 7, 25, 30 and 40 under 35 U.S.C. section 102 as anticipated by Suzuki. Page 6 of the Office Action rejects claims 11 and 12 under 35 U.S.C. § 103 over Suzuki. Page 7 of the Office Action rejects claims 10 and 13 under 35 U.S.C. § 103 over Suzuki and Masuda.

Copies of an image of a storage medium such as sectors or blocks of a disk can be made and stored as a log or log file. The copy can be made before an update occurs (that is, when the update access is detected) called before the image or BI. The copy can also be made after the revision or update has occurred. The present invention creates the log "before a write access occurs" (see claims 6, 25, 30, 35 and 40 and the specification at page 14 starting on line 15). Suzuki creates the log file after the update occurs. This copy is stored in what is called a "backout file" used for backing out the changes. In particular, Suzuki states:

> Then, each computer system comprises a backout file for temporarily storing log data for the shared data base which are generated in a transaction **at the end of each transaction.**

(See Suzuki, col. 2, lines 30-32, **bold** emphasis added)

Backout files 4-i (i=1, 2) provided for each of the computer systems 2-i,
temporarily store log data **at the end of a transaction process**.
(See Suzuki, col. 4, lines 32-34, **bold** emphasis added).

As noted by the Examiner, Suzuki shares the log with the other computers. The present invention obtains the entire log from two or more computers by gathering the data from the computers. However, the data is not shared (as depicted by the downward flowing arrows in figure 4) but the particular computer log is maintained in the original computers and while the entire log or combined log is in the log medium accessible by the log management device.

As can be seen from the above discussion the present is very different from Suzuki. By copying before update and having the log combined and not shared, security is improved. Access speed is also improved by not having to access parts of the entire log stand in different computers.

Masuda is directed to disaster recovery and does not address the issues of copying as in the present invention. Masuda essentially adds nothing to Suzuki with respect the features of the invention discussed above.

The dependent claims depend from the above-discussed independent claims and are patentable over the prior art for the reasons discussed above. The dependent claims also recite additional features not taught or suggested by the prior art. For example, claim 8 emphasizes that the entire log (or combined log) is created as each access occurs. This is very different from the sharing of the logs of the computers with other computers as in Suzuki. It is submitted that the dependent claims are independently patentable over the prior art.

New claim 41 emphasizes the copying before an update and the creation of the combined log as compared to the copying after an update requiring a backout procedure and the sharing of logs between computers that occurs in Suzuki. Nothing in the prior art teaches or suggests claim 41. It is submitted that the new claim distinguishes over the prior art.

It is submitted that the claims satisfy the requirements of 35 U.S.C. 112. It is further submitted that the claims are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

If any further fees, other than and except for the issue fee, are necessary with respect to this paper, the U.S.P.T.O. is requested to obtain the same from deposit account number 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: _____6/22/4_____   By: _____
                                    J. Randall Beckers
                                    Registration No. 30,358

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501